

**In the Claims:**

Please amend the claims as shown in the following listing of claims, which will replace all prior versions and listings of claims in the application:

1.-37. (Canceled)

38. (New) A hyperimmune serum-reactive antigen comprising an amino acid sequence from any of SEQ ID NOs: 218-434, 449-462, or 475-486 or fragments thereof.

39. (New) The hyperimmune serum-reactive antigen or fragment of claim 38, further defined as a peptide comprising an amino acid sequence described in: the “predicted immunogenic aa” and/or “location of identified immunogenic region” column of Table 1A and/or Table 5; the “Identical region” column of Table 1B; the “aa from” to “aa to” columns of any of Tables 2, 4, 6, and 7.

40. (New) The hyperimmune serum reactive antigen or fragment of claim 38, further defined as comprising an amino acid sequence of amino acids: 4-20, 35-44, 65-70, 73-87, 92-98, 112-137, 152-161, 177-186, 193-200, 206-213, 229-255, 282-294, 308-313, 320-326, 349-355, 373-384, 388-406, 420-425 and 115-199 of SEQ ID NO:218; 5-24, 35-41, 44-70, 73-89, 103-109, 127-143, 155-161, 185-190, 192-207, 212-219, 246-262, 304-336, 372-382, 384-393, 398-407, 412-418, 438-444, 1-75, 76-161 and 164-239 of SEQ ID NO:219; 4-10, 16-58, 60-71, 77-92, 100-126, 132-146, 149-164, 166-172, 190-209, 214-220, 223-229, 241-256, 297-312, 314-319, 337-343, 351-359, 378-387, 398-418, 421-428, 430-437, 440-448, 462-471, 510-519, 525-536, 552-559, 561-568, 573-582, 596-602, 608-630, 637-649, 651-665, 681-702, 714-732, 739-745, 757-778, 790-805, 807-815, 821-829, 836-842, 846-873, 880-903, 908-914, 916-923, 931-940, 943-948, 956-970, 975-986, 996-1015, 1031-1040, 1051-1069, 1072-1095, 1114-1119, 1130-1148, 1150-1157, 1169-1176, 1229-1238 and 802-812 of SEQ ID NO:220; 5-12, 14-26, 35-47, 52-67, 72-78, 83-98, 121-141, 152-159, 163-183, 186-207, 209-257, 264-277, 282-299, 301-309, 312-318, 324-339, 358-368, 372-378, 387-397, 425-431 and 46-291 of SEQ ID NO:221; 29-38, 44-64, 70-76, 78-87, 94-100, 102-112, 119-134, 140-149, 163-173, 178-186, 188-194, 207-234, 247-262, 269-290 and 73-92 of SEQ ID NO:222; 10-28, 36-63, 77-87, 103-119, 127-136, 141-169, 171-183, 195-200, 207-232, 236-246, 251-265, 268-283, 287-297, 314-322, 335-343, 354-363, 384-390, 405-411, 419-436, 443-455, 467-473, 480-513, 518-529, 550-557, 565-585, 602-608, 616-625, 632-660, 665-677, 685-701, 726-736, 738-747, 752-761, 785-796, 801-813, 838-853, 866-871

and 757-774 of SEQ ID NO:223; 31-38, 61-66, 74-81, 90-115, 123-145, 154-167, 169-179, 182-193, 200-206, 238-244, 267-272 and 235-251 of SEQ ID NO:224; 19-25, 38-54, 56-64, 66-72, 74-92, 94-100, 116-129, 143-149, 156-183, 204-232, 253-266, 269-275, 294-307 and 241-313 of SEQ ID NO:225; 5-34, 50-56, 60-65, 74-85, 89-97, 108-119, 159-165, 181-199, 209-225, 230-240, 245-251, 257-262, 274-282, 300-305 and 64-75 of SEQ ID NO:226; 5-13, 16-21, 27-42, 45-52, 58-66, 74-87, 108-114, 119-131 and 39-51 of SEQ ID NO:227; 6-23, 46-54, 59-65, 78-84, 100-120, 128-133, 140-146, 159-165, 171-183, 190-204, 224-232, 240-248, 250-259, 274-280, 288-296, 306-315 and 267-274 of SEQ ID NO:228; 5-12, 15-24, 26-36, 42-65, 68-80, 82-104, 111-116, 125-144, 159-167, 184-189, 209-218, 235-243, 254-265, 269-283, 287-300, 306-316, 318-336, 338-352, 374-392 and 162-174 of SEQ ID NO:229; 30-42, 45-54 and 25-37 of SEQ ID NO:230; 10-30, 53-59, 86-95, 116-130, 132-147, 169-189, 195-201, 212-221, 247-256, 258-265, 278-283, 291-298, 310-316, 329-339, 341-352, 360-367, 388-396, 398-411, 416-432, 443-452, 460-466, 506-512, 515-521, 542-548 and 419-431 of SEQ ID NO:231; 4-27, 30-53, 60-67, 70-90, 92-151, 159-185, 189-195, 198-210, 215-239 and 173-189 of SEQ ID NO:232; 4-26, 41-54, 71-78, 116-127, 140-149, 151-158, 161-175, 190-196, 201-208, 220-226, 240-252, 266-281, 298-305, 308-318, 321-329, 344-353, 372-378, 384-405, 418-426, 429-442, 457-463, 494-505, 514-522 and 174-188 of SEQ ID NO:233; 17-25, 27-39, 61-67, 81-89, 99-110, 120-131, 133-139, 147-161, 167-172, 179-185, 192-198, 203-213, 226-238, 243-258, 261-267, 284-290, 296-307, 311-328, 340-352, 356-371 and 239-256 of SEQ ID NO:234; 8-30, 40-49, 67-80, 114-123, 126-142, 152-162, 188-194 and 57-70 of SEQ ID NO:235; 4-23, 28-34, 36-47, 50-61, 76-81, 89-94, 96-104, 112-119, 126-146, 155-181, 195-200, 208-214, 220-229, 244-260, 263-276, 282-288, 292-300, 317-323, 336-351, 353-359, 363-375, 382-399, 415-432, 444-455, 458-471, 476-481, 484-492, 499-517, 522-529, 535-541, 543-568, 572-584, 586-600, 607-617, 626-637, 656-675 and 282-297 of SEQ ID NO:236; 6-24, 30-35, 38-45, 63-91, 134-140, 146-160, 167-188, 214-220, 226-234, 244-250, 260-270, 286-301, 316-329, 340-371, 429-446, 448-459, 474-481, 485-491, 512-526, 537-544, 550-565, 573-583, 596-613, 621-630, 652-658 and 87-97 of SEQ ID NO:237; 8-20, 26-48, 56-67, 76-86, 94-109, 115-121, 123-129, 143-160, 178-186, 191-198, 201-208, 221-236, 238-244, 260-268 and 237-247 of SEQ ID NO:238; 4-40, 42-57, 73-87, 98-117, 126-135, 150-156, 166-174, 196-217, 231-236, 248-258, 276-284, 293-301, 307-313, 339-347, 359-365, 375-387, 395-402, 428-440, 445-456, 485-490, 497-505, 535-541, 547-555, 610-625, 648-656, 665-671 and 448-528 of SEQ ID NO:239; 10-18, 39-45, 51-61, 80-96, 98-106, 110-115, 158-172, 174-183, 191-200, 220-237, 249-255, 274-289, 308-324, 331-341, 372-381, 384-397, 405-414 and 322-338 of SEQ ID NO:240; 30-36, 38-56, 85-

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NO:289; 13-29 of SEQ ID NO:296; 136-159 of SEQ ID NO:348; 205-222 of SEQ ID NO:349; 99-110 of SEQ ID NO:350; 160-176 of SEQ ID NO:351; 457-470 of SEQ ID NO:355; 221-237 of SEQ ID NO:356; 167-190 of SEQ ID NO:357; 96-120 of SEQ ID NO:361; 399-417, 503-519 and 544-563 of SEQ ID NO:364; 46-68, 159-183 and 184-198 of SEQ ID NO:371; 463-481 of SEQ ID NO:372; 110-129 and 168-184 of SEQ ID NO:219; 877-901, 333-354, 326-344 and 801-809 of SEQ ID NO:277; 1-54 of SEQ ID NO:347; 544-563, 31-51, 107-119, 399-417 and 503-519 of SEQ ID NO:364; 120-198 of SEQ ID NO:218; 20-35 of SEQ ID NO:219; 118-201 of SEQ ID NO:221; 48-132 of SEQ ID NO:242; 118-136 of SEQ ID NO:249; 162-178 of SEQ ID NO:253; 347-364 of SEQ ID NO:254; 699-715 of SEQ ID NO:255; 50-76 of SEQ ID NO:258; 785-819 and 44-128 of SEQ ID NO:269; 90-128 of SEQ ID NO:274; 314-384 of SEQ ID NO:289; 327-349 of SEQ ID NO:293; 242-314, 405-478 and 23-100 of SEQ ID NO:304; 129-210 of SEQ ID NO:305; 162-188 of SEQ ID NO:307; 750-772 of SEQ ID NO:310; 1-56 of SEQ ID NO:335; 322-337 of SEQ ID NO:337; 72-90 of SEQ ID NO:339; 374-395 of SEQ ID NO:345; 136-159 of SEQ ID NO:348; 141-164 of SEQ ID NO:358; 96-157 of SEQ ID NO:361; 1-82 of SEQ ID NO:363; 489-556 of SEQ ID NO:364; 159-183 and 49-133 of SEQ ID NO:371; 4-26, 35-41, 53-61, 73-84, 103-108, 114-120, 140-146, 156-162, 192-208, 214-219, 227-233, 239-252, 260-268, 284-297, 1-48 and 113-133 of SEQ ID NO:475; 4-27, 38-44, 50-56, 59-64, 72-79, 83-89, 92-97, 108-116, 123-148, 152-167, 183-196, 200-220, 232-244, 255-261, 265-274, 282-302, 309-317, 1-79 and 231-302 of SEQ ID NO:476; 6-28, 66-72, 85-105, 115-121, 144-151, 160-170, 176-185, 223-230, 252-288, 296-310, 319-333, 367-374, 458-464, 471-480, 483-488, 520-528, 530-549, 559-564, 593-601, 606-616, 636-643, 655-662, 676-682, 684-699, 719-726, 735-750, 757-764, 777-785, 799-810, 812-843, 846-853, 868-873, 880-889, 891-899, 909-929, 934-940, 963-969, 998-1004, 1007-1014, 1016-1022, 1030-1046, 1-80 and 808-821 of SEQ ID NO:477; 7-24, 35-41, 75-81, 91-114, 122-132, 137-144, 148-156, 183-192, 194-200, 212-228, 233-238, 251-258, 275-295, 326-332, 337-346, 1-79 and 305-321 of SEQ ID NO:478; 31-38, 42-52, 66-72, 86-92, 98-104, 115-122, 127-146, 154-164, 169-187, 198-212, 225-237, 255-269, 13-92 and 135-142 of SEQ ID NO:479; 4-36, 39-49, 63-69, 71-77, 81-88, 123-131, 133-139, 160-169, 174-180, 188-194, 210-217, 273-278, 289-300, 317-334, 336-341, 383-401, 425-438, 1-68, 212-270 and 402-446 of SEQ ID NO:480; 21-29, 31-42, 49-63, 72-79, 81-93, 112-132, 159-165, 188-195, 197-232, 262-267, 279-286, 294-301, 318-326, 348-366, 381-405, 409-426, 436-465, 471-480, 484-492, 497-505, 521-544, 554-561, 567-577, 581-589, 601-609, 611-622, 636-651, 653-667, 669-685, 700-708, 716-722, 729-744, 749-766, 780-786, 789-811, 814-864, 1-57 and 84-106 of SEQ ID NO:481; 6-24, 35-48, 57-63, 72-78,

87-92, 113-119, 123-137, 147-153, 173-181, 212-233 and 1-124 of SEQ ID NO:482; 13-34, 62-69, 78-83, 86-91, 98-104, 107-115, 146-159, 179-188, 195-205, 209-221, 226-233, 239-253, 276-282, 284-294, 297-308, 331-354, 375-382, 388-399, 421-433, 449-458, 464-469, 472-491, 508-513, 525-531, 534-550, 575-593, 601-618, 629-635, 654-661, 666-680, 706-721, 723-740, 771-805, 810-830, 845-851 and 1-84 of SEQ ID NO:483; 4-32, 45-64, 73-83, 86-92, 100-111, 125-147, 157-163, 170-175, 177-188, 226-232, 245-252, 258-274, 320-335, 348-359 and 1-71 of SEQ ID NO:484; 13-40, 43-71, 76-83, 87-101, 109-119, 125-156, 162-175, 182-219, 226-232, 240-262, 270-287, 306-318, 326-342, 344-408, 414-444, 449-456 and 1-51 of SEQ ID NO:485; 4-16, 18-34, 45-54, 99-108, 134-140, 203-212, 241-257, 266-274, 279-291, 308-315, 330-336, 355-370, 374-382, 402-410, 428-455, 466-472, 474-480, 531-554, 560-566, 572-580, 597-618, 632-660, 664-674, 676-685, 691-705, 708-735, 750-768, 1-87 and 342-480 of SEQ ID NO:486; 115-132 and 1-26 of SEQ ID NO:475; 33-55 of SEQ ID NO:476; 1-25 of SEQ ID NO:478; 37-61 of SEQ ID NO:479; 1-24 of SEQ ID NO:480; 1-23 of SEQ ID NO:481; 46-60 of SEQ ID NO:482; 1-28, 23-50 and 45-71 of SEQ ID NO:483; 1-22 and 17-38 of SEQ ID NO:484; 1-22 and 17-38 of SEQ ID NO:485; 1-27, 22-47 and 422-447 of SEQ ID NO:486; 115-132 and 1-47 of SEQ ID NO:475; 1-55 of SEQ ID NO:476; 22-85 of SEQ ID NO:477; 307-320 and 1-44 of SEQ ID NO:478; 15-76 and 40-92 of SEQ ID NO:479; 1-59, 213-269 and 403-445 of SEQ ID NO:480; 1-56 and 85-105 of SEQ ID NO:481; 37-121 of SEQ ID NO:482; 1-71 of SEQ ID NO:483; 1-38 of SEQ ID NO:484; 1-38 of SEQ ID NO:485; 1-47 of SEQ ID NO:486.

41. (New) The hyperimmune serum-reactive antigen or fragment of claim 38, comprising at least 6 contiguous amino acids of any of SEQ ID NOs: 218-434, 449-462, or 475-486.

42. (New) The hyperimmune serum-reactive antigen or fragment of claim 38, comprising at least 8 contiguous amino acids of any of SEQ ID NOs: 218-434, 449-462, or 475-486.

43. (New) The hyperimmune serum-reactive antigen or fragment of claim 38, comprising at least 10 contiguous amino acids of any of SEQ ID NOs: 218-434, 449-462, or 475-486.

44. (New) The hyperimmune serum-reactive antigen or fragment of claim 38, further defined as directed against *S. agalactiae*.

45. (New) A pharmaceutical composition comprising a hyperimmune serum-reactive antigen or fragment of claim 38.

46. (New) The pharmaceutical composition of claim 45, wherein the hyperimmune serum-reactive antigen or fragment is directed against *S. agalactiae*.
47. (New) The pharmaceutical composition of claim 45, further defined as comprising at least two different hyperimmune serum-reactive antigens and/or fragments.
48. (New) The pharmaceutical composition of claim 47, wherein the at least two different hyperimmune serum-reactive antigens and/or fragments are both directed against *S. agalactiae*.
49. (New) The pharmaceutical composition of claim 45, further comprising an immunostimulatory substance.
50. (New) The pharmaceutical composition of claim 49, wherein the immunostimulatory substance is a polycationic polymer, an immunostimulatory deoxynucleotide (ODN), a peptide containing at least two LysLeuLys motifs, a neuroactive compound, alum, or a Freund's complete or incomplete adjuvant.
51. (New) The pharmaceutical composition of claim 50, wherein the polycationic polymer is a polycationic peptide.
52. (New) The pharmaceutical composition of claim 50, wherein the neuroactive compound is human growth hormone.
53. (New) The pharmaceutical composition of claim 45, further defined as a vaccine.
54. (New) The pharmaceutical composition of claim 53, further defined as a vaccine for treatment and/or prevention of *S. agalactiae* infection.
55. (New) A method of vaccinating a subject comprising:  
obtaining a pharmaceutical composition of claim 45; and  
administering the pharmaceutical composition to a subject;  
wherein the subject is vaccinated.
56. (New) The method of claim 55, wherein the subject is a human.
57. (New) The method of claim 55, further defined as a method of treating and/or preventing *S. agalactiae* infection in the subject.



58. (New) The method of claim 55, wherein the hyperimmune serum-reactive antigen or fragment is directed against *S. agalactiae*.
59. (New) The method of claim 55, wherein the pharmaceutical composition comprises at least two different hyperimmune serum-reactive antigens or fragments thereof.
60. (New) The method of claim 59, wherein the at least two different hyperimmune serum-reactive antigens or fragments thereof are both directed against *S. agalactiae*.